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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/367,040	08/06/1999	ALEXANDRA BROWNFIELD	MERCK2009	3802

23599 7590 09/22/2004

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EXAMINER	
KRUER, KEVIN R	

ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/367,040	BROWNFIELD ET AL.	
	Examiner	Art Unit	
	Kevin R Kruer	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *August 9, 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16 and 21-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16 and 21-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 08/09/2004 has been entered.

Claim Rejections - 35 USC § 112

2. The rejection of claims 16- 24, 26-28, and 30 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement has been overcome by amendment. Applicant has amended the claims to remove reference to a "mean particle size of 1-60um."

Claim Rejections - 35 USC § 102

1. The rejection of claims 16-19, 21, 23, 24, and 28-30 under 35 U.S.C. 102(b) as being anticipated by 46-026406 (herein referred to as Shiohara) has been overcome by amendment. Claim 16 has been amended to specify that the platelet form substrates comprise a mixture of mica, pearl luster pigment, and electrically conductive pigment.

Claim Rejections - 35 USC § 103

2. The rejection of claim 20 under 35 U.S.C. 103(a) as being unpatentable over 46-026406 (herein referred to as Shiohara), as applied to claims 16-19, 21, 23, 24, and 28-30 above, has been overcome by amendment.

3. The rejection of claims 16-21, 23, 24, and 26-28 under 35 U.S.C. 103(a) as being unpatentable over 46-026406 (herein referred to as Shiohara) in view of Berger et al (US 4,740,269) has been overcome by amendment.

4. The rejection of claims 16-23, 24, 27, and 28 under 35 U.S.C. 103(a) as being unpatentable over 46-026406 (herein referred to as Shiohara) in view of Humphrey (US 3,770,577) has been overcome by amendment.

5. The rejection of claim 25 under 35 U.S.C. 103(a) as being unpatentable over Shinmoto et al (US 5,897,938) in view of Schmidt et al (US 6,019,831) has been overcome by amendment.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 16, 21, 23, 24, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over 46-026406 (herein referred to as Shiohara) in view of Okuda et al (US 5,575,957).

Shiohara teaches a pearlescent paper comprising a hydrolytic organic titanium compound or titanium compound halide that is adhered to flat microcrystals having an average diameter of 20-100um and a thickness of 500-1,000um. The prepared microcrystal is added to papermaking raw material during papermaking process (claim 1) in amounts of 4wt% based upon the weight of the pulp (See examples). Said process is understood to "homogeneously" distribute the pulp and the microcrystals. The micro crystal may comprise mica (page 4, lines 3+ of translation). The paper may further comprise color pigments (last line of page 5). Herein the microcrystals taught in Shiohara are understood to read on the claimed mica platelet-form substrates and the claimed peal luster pigment.

Shiohara does not teach that the paper should further comprise an electrically conductive pigment. However, Okuda teaches that electro-conductive particles have been incorporated into papers (col 1, lines 44+) in order to give the paper antistatic properties (col 1, lines 16+). The desired conductivity can be obtained by utilizing small amounts of electro-conductive particles (col 1, lines 55+). Okuda teaches a preferred electro-conductive particle comprising a tin oxide fine particle having a mean diameter of 0.005-1um and a mean length of 0.05-10um and an aspect ratio of 3 or higher (col 2, lines 42+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the acicular electro-conductive tin oxide particles taught in Okuda to the paper taught in Shiohara. The motivation for doing so would have been to give the paper the desired conductive properties. Furthermore, Okuda teaches that the level of conductivity is proportional to the amount of electro-conductive particles added to the paper (col 1, lines 55+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the amount of electro-conductive particles added to the paper taught in Shiohara. The motivation for doing so would have been to obtain the desired degree of conductivity.

8. Claims 16, 21, 23, 24, and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over 46-026406 (herein referred to as Shiohara) in view of Okuda et al (US 5,575,957) and Berger et al (US 4,740,269).

Shiohara teaches a pearlescent paper comprising a hydrolytic organic titanium compound or titanium compound halide that is adhered to flat microcrystals having an average diameter of 20-100um and a thickness of 500-1,000um. The prepared

microcrystal is added to papermaking raw material during papermaking process (claim 1) in amounts of 4wt% based upon the weight of the pulp (See examples). The micro crystal may comprise mica (page 4, lines 3+ of translation). The paper may further comprise color pigments (last line of page 5).

Shiohara does not teach that the paper should further comprise an electrically conductive pigment. However, Okuda teaches that electro-conductive particles have been incorporated into papers (col 1, lines 44+) in order to give the paper antistatic properties (col 1, lines 16+). The desired conductivity can be obtained by utilizing small amounts of electro-conductive particles (col 1, lines 55+). Okuda teaches a preferred electro-conductive particle comprising a tin oxide fine particle having a mean diameter of 0.005-1um and a mean length of 0.05-10um and an aspect ratio of 3 or higher (col 2, lines 42+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the acicular electro-conductive tin oxide particles taught in Okuda to the paper taught in Shiohara. The motivation for doing so would have been to give the paper the desired conductive properties. Furthermore, Okuda teaches that the level of conductivity is proportional to the amount of electro-conductive particles added to the paper (col 1, lines 55+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the amount of electro-conductive particles added to the paper taught in Shiohara. The motivation for doing so would have been to obtain the desired degree of conductivity.

Shiohara also does not teach that the paper may be marked by exposing it to laser radiation. However, Berger teaches a process of making authenticating marks on

paper by contacting with laser radiation from a laser light source (abstract). The laser makes a relief like authenticating mark by effecting structural changes in the fiber of the paper (col 1, lines 56+). Thus, it would have been obvious to one of ordinary skill in the art to expose the paper of Shiohara to a laser in order to make an authenticating relief-like mark on the paper.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinmoto et al (US 5,897,938) in view of Schmidt et al (US 6,019,831). Shinmoto teaches a laser marking composition containing an inorganic powder and a binder (abstract). The composition may be applied to packing paper, labels, and cans made of paper (col 5, lines 34+).

Shinmoto does not teach that the inorganic powder should be platelet form. However, Schmidt teaches a non-lusterous iron oxide containing color pigment having a particle size of less than 60um and comprising a platelet-like substrate (abstract). The pigment exhibits high color intensity and high hiding power (col 2, lines 1+) and may be used as a laser markable pigment in plastic composition (col 11, lines 63+). Thus, it would have been obvious to on of ordinary skill in the art to utilize the pigment taught in Schmidt as the inorganic powder taught in Shinmoto because said pigment exhibits high hiding power and high color intensity.

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection. In hopes of expediting the

prosecution of the application, the examiner would like to take this opportunity to respond to some of Applicant's arguments that may be relevant to the newly applied rejections.

Applicant argues that JP fails to teach or suggest a mixture of different inorganic platelet-form substrates comprising mica, pearl luster pigment, and electrically-conductive pigment, because it fails to teach an electrically conductive pigment. The examiner agrees with applicant's assessment of the reference. In order to meet the electrically conductive pigment limitation of claim 16, the examiner relies upon the teachings of Okuda.

Applicant traverses the assertion that titanium dioxide reads on "electrically conductive pigment." The examiner notes that the pending rejections do not rely upon titanium dioxide to read on the claimed "electrically conductive pigment." Thus, applicant's arguments are moot in view of the newly applied rejections.

Applicant argues that JP gives no indication that the paper is suitable for laser marking. The examiner concedes that there is no explicit teaching in JP that the paper may be laser marked. However, the courts have held that, if the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states the purpose of the invention rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. In the present application, the preamble limitation "laser-markable" only recites the purpose of the invention. Therefore, the preamble fails to distinguish the claim over the prior art. Furthermore,

the examiner maintains the position that JP is properly combinable with Berger because Berger teaches that any paper may be laser marked.

With respect to the claimed "absorber material having a pale intrinsic color," the examiner takes the position that the applied art meets said limitation because the applied art comprises a paper containing the same materials as applicant's claimed absorber material.

Conclusion

10. In order to expedite prosecution of this application, applicant's counsel is encouraged to contact the examiner in order to schedule an interview.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin R. Kruer
Patent Examiner
Art Unit 1773